

IN THE CLAIMS:

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Change "CLAIMS" to -- I claim: --.

Claims 1-3 (canceled).

1           4. (new) A data storage and retrieval system comprising:  
2           an optical memory constituted as a vitreous fluorescent  
3           photosensitive body selected from the group which consists of  
4           fluorescent photosensitive glass and fluorescent photosensitive  
5           vitreous ceramic constituting an information recording medium; and  
6           at least one laser for directing a beam at said memory  
7           and adapted to read stored information from and write information  
8           to be stored to said memory.

1           5. (new) The system defined in claim 4 wherein said  
2           memory is composed of a fluorescent photo-sensitive glass.

1           6. (new) The system defined in claim 4 wherein said  
2           memory is composed of a vitroceramic.

1           7. (new) The system defined in claim 4 which comprises  
2           a confocal microscope;  
3           a tunable laser having light pulses at a rate of a  
4           maximum of 100 fs for reading and writing from and to said memory  
5           through said confocal microscope;

6                   a vertical scanning system and a radial scanning system  
7   for the movement or writing and excitation beams over said memory;  
8                   an engine for rotating said memory; and  
9 *12*                an excitation laser having a beam perpendicular to a  
10   fluorescent beam from said memory and provided with a vertical  
11   scanner for reading said memory by a one-photon process.

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